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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,252	07/15/2005	Masahiro Inoue	275414US3PCT	2737
22850 7590 10/15/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER WILLIAMS, THOMAS J	
			ART UNIT 3683	PAPER NUMBER
			NOTIFICATION DATE 10/15/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/542,252

Applicant(s)

INOUE ET AL.

Examiner

Thomas J. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgment is made in the receipt of the amendment filed August 29, 2007.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2002/0012484 A1 to Salou et al.

Re-claim 1, Salou et al. disclose a sensor equipped hub, comprising: a hub unit having a rotation side raceway member 3 and a fixed side raceway member 2 and rolling bodies arranged between the two raceway members (see paragraph 56); a brake caliper (illustrated in figure 9) is fastened to the fixed raceway member, a brake torque sensor 38 is provided on the fixed raceway member at a location such that the sensor is fixedly mounted with respect to the fixed side raceway member, see figure 2.

Re-claim 2, a caliper mount 43/44 is provided immovable with the fixed side raceway member 2 and extends radially outwardly, the brake caliper is attached to the caliper mount in known fashion, and the sensor is provided at a base end of the caliper mount.

Re-claim 3, the brake torque sensor comprises a strain gauge, see paragraphs 95-96.

Re-claim 8, a caliper mount member is broadly interpreted as a member part of the caliper which is separate from the caliper mount flange 43/44.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4, 5, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salou et al. in view of US 5,366,233 to Kozyra et al.

Re-claim 4, Salou et al. teach the hub assembly attached to a support member at holes 26. However, Salou et al. fail to specifically teach a knuckle arm connected with the wheel, which is common for steering wheel assemblies.

Kozyra et al. teach a common steering knuckle assembly attached to holes 50" in a hub assembly, these holes are interpreted as being functionally equivalent to holes 26 in Salou et al. As such it would have been obvious to one of ordinary skill in the art to have simply attached the hub assembly of Salou et al. to a knuckle arm as taught by Kozyra et al., thus utilizing the hub assembly of Salou et al. on a steered wheel.

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Re-claim 5, the caliper mount is a caliper mount arm 43/44 integral with the fixed side raceway member 2, the brake caliper is attached to the arm.

Re-claim 7, the caliper mount arm is provided at a different location than that of the knuckle attaching flange, interpreted as the flanges provided with holes 26.

Re-claim 9, Salou et al. teach the hub assembly attached to a support member at holes 26. However, Salou et al. fail to specifically teach a knuckle arm connected with the wheel, which is common for steering wheel assemblies.

Kozyra et al. teach a steering knuckle arm attached to a flange separate from the raceway. This provides the vehicle the ability to steer. It would have been obvious to one of ordinary skill in the art to have provided the assembly of Salou et al. a knuckle arm assembly as taught by Kozyra et al., thus providing the operator of the vehicle the ability to steer the vehicle as desired.

7. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salou et al. in view of US 4,618,159 to Kozyra et al.

Re-claims 4-6, Salou et al. teach the hub assembly attached to a support member at holes 26. However, Salou et al. fail to specifically teach a knuckle arm connected with the wheel, which is common for steering wheel assemblies.

Kozyra et al. teach a common steering knuckle assembly, wherein the assembly is provided with a knuckle attaching flange 36 that is integral with a caliper mount 32/34, the caliper mount is provided at the same position as the knuckle attaching flange. It would have been obvious to one of ordinary skill in the art to have provided the assembly of Salou et al. with a knuckle flange integral with the caliper mount as taught by Kozyra et al., thus providing a means for using the assembly on a steering wheel.

Response to Arguments

8. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is 571-272-7128. The examiner can normally be reached on Wednesday-Friday from 6:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi, can be reached at 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-6584.

TJW

October 9, 2007

THOMAS J. WILLIAMS
PRIMARY EXAMINER

Thomas Williams

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Oct. 10, 2007